

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of

Yoshimura et al.

For: **MULTI-LAYER OPTO-ELECTRONIC  
SUBSTRATES WITH ELECTRICAL AND  
OPTICAL INTERCONNECTIONS AND  
METHODS FOR MAKING**

Serial No.: 09/295,431

Filed: April 20, 1999

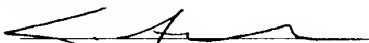
Examining  
Attorney: Michael P. Mooney

Attorney  
Docket No.: 25916-118 (6136/53461)

**CERTIFICATE OF EXPRESS MAIL**  
**Under 37 C.F.R. § 1.10**

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail" Service on the date indicated below and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

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**TRANSMITTAL LETTER**

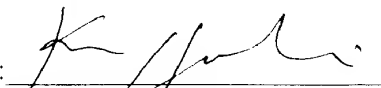
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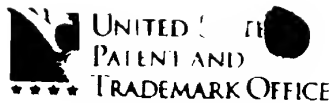
Transmitted herewith for filing in the above-identified patent application are:

- ☒ Response to Office Action mailed April 19, 2002
- ☒ A check in the amount of \$110.00 for 1 month extension of time under 37 C.F.R. § 1.136(a)
- ☒ Return Postcard.

COUDERT BROTHERS LLP

By:   
Kim Kanzaki  
Registration No.: 37,652

June 18, 2002  
COUDERT BROTHERS LLP  
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Technology Center 2800 has taken continuous quality improvement efforts to ensure that the accompanying correspondence meets high quality standards, and focuses on good customer service. It is important to us that you are satisfied with the services we provide.

If the communication you have received has any issues that raise concerns as to the quality and/or clarity of the action taken by the examiner, we invite you to contact the appropriate Supervisory Primary Examiner. You may also contact one of our Quality Assurance Specialists.

**Quality Assurance Specialists:**

Don Hajec.....703-308-4075

Paul Dzierzynski.....703-308-4822

If the contents of the attached correspondence have any clerical omissions, e.g., missing references or pages, illegible text, or any other similar errors, please contact us at the number below. We will take appropriate action to expedite the necessary corrections. Also, if you have general questions concerning any application assigned to Technology Center 2800, please contact our Customer Service Center. Questions concerning the merits of the application must be directed to the Examiner in charge of the particular application, then to the supervisor if appropriate.

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Any matter not satisfactorily resolved by the listed resources should be brought to the attention of the appropriate Director listed below. We appreciate your assistance in helping us help you.

**Directors, Technology Center 2800**

**Semi-conductors, Electrical, Optical Systems & Components**

Sharon Gibson	703/308-0658	2810
Rolf G. Hille	703/306-0658	2820
Richard Seidel	703/306-3431	2830/40
Howard N. Goldberg	703/306-3431	2850/60
Janice A. Falcone	709/308-0530	2870/80

## **Recent Statutory Changes to 35 U.S.C. § 102(e)**

On November 2, 2002, President Bush signed the 21st Century Department of Justice Appropriations Authorization Act (H.R. 2215) (Pub. L. 107-273, 116 Stat. 1758 (2002)), which further amended 35 U.S.C. § 102(e), as revised by the American Inventors Protection Act of 1999 (AIPA) (Pub. L. 106-113, 113 Stat. 1501 (1999)). The revised provisions in 35 U.S.C. § 102(e) are completely retroactive and effective immediately for all applications being examined or patents being reexamined. Until all of the Office's automated systems are updated to reflect the revised statute, citation to the revised statute in Office actions is provided by this attachment. This attachment also substitutes for any citation of the text of 35 U.S.C. § 102(e), if made, in the attached Office action.

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

**A person shall be entitled to a patent unless –**

**(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.**

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 prior to the amendment by the AIPA that forms the basis for the rejections under this section made in the attached Office action:

**A person shall be entitled to a patent unless –**

**(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.**

For more information on revised 35 U.S.C. § 102(e) visit the USPTO website at [www.uspto.gov](http://www.uspto.gov) or call the Office of Patent Legal Administration at (703) 305-1622.



UNITED STATES PATENT AND TRADEMARK OFFICE

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UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/295,431	04/20/1999	TETSUZO YOSHIMURA	6136/53461	7173

7590 04/19/2002  
Coudert Brothers  
600 Beach Street  
San Francisco, CA 94109

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APR 25 2002

COUDERT BROTHERS LLP  
SAN FRANCISCO

EXAMINER

MOONEY, MICHAEL P

ART UNIT

PAPER NUMBER

2877

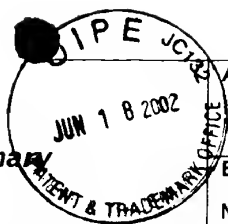
DATE MAILED: 04/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

DOCKETED

DATE 4-25-02  
BY [Signature]

## Office Action Summary



Application No.

09/295,431

Examiner

Michael P. Mooney

Applicant(s)

YOSHIMURA ET AL.

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 302 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 742 8) ☒ Claim(s) 1-48 are subject to restriction and/or election requirement. <sup>further</sup>

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SAN FRANCISCO

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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TECHNICAL STAFF  
JUN 18 2002

### DETAILED ACTION

The Office acknowledges Applicant's election of claims 1-48 without traverse in response to the prior Office action.

#### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-18, drawn to substrates having layers with polymeric waveguides and vertical optical couplers for coupling between adjacent layers classified in class 385, subclass 14. Figs 9 & 10.
- II. Claims 19-33 drawn to optoelectric layers laminated to one another class 385, subclass 14. Figs. 34-36.
- III. Claim 34 drawn to first and second boards disposed opposite one another so that corresponding switch devices and photodetector devices are aligned to one another classified in class 385, subclass 14. Fig. 143.
- IV. Claims 35-40 drawn to first and second optoelectronic multichip modules and at least one passive film with an OWG layer disposed proximate said bottom surfaces classified in class 385 subclass 14. Figs. 144-146.

Because these inventions are distinct for the reasons given above and the search required for each group above is distinct, restriction for examination purposes as indicated is proper.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 41, 45 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. *If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).*

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

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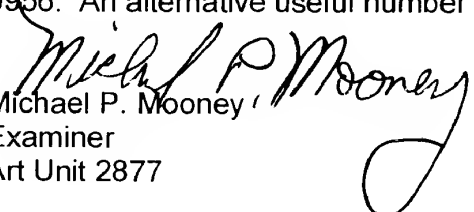
remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Mooney whose telephone number is 703-308-6125. The examiner can normally be reached during weekdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 703-308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956. An alternative useful number for status inquiries is 703-306-3329.

  
Michael P. Mooney  
Examiner  
Art Unit 2877

  
Frank G. Font  
Supervisory Patent Examiner  
Art Unit 2877

FGF/mpm  
4/18/02